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(54) Title: HYDROTHERMAL PROCESS FOR THE PREPARATION OF QUASI-CRYSTALLINE BOEHMITE

(57) Abstract: Process for the preparation of quasi-crystalline boehmite comprising the steps of: (a) preparing an aqueous precursor mixture comprising a water-insoluble aluminium source; (b) decreasing the pH of the precursor mixture of step (a) by at least 2 units; (c) increasing the pH of the mixture of step (b) by at least 2 units, and (d) aging the mixture of step (c) under hydrothermal conditions to form a quasi-crystalline boehmite. This process provides for the hydrothermal preparation of quasi-crystalline boehmites with high peptizability. The invention therefore further relates to quasi-crystalline boehmites with a high peptizability, measured as the Z-average submicron particle size. This Z-average submicron particle size preferably is less than 500 nm, more preferably less than 300 nm, even more preferably less than 200 nm, and most preferably less than 100 nm.

WO 2005/051845 A2